

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 12 (Cancelled).

13. (Previously presented) An apparatus for determining and/or monitoring a physical or chemical variable in a process, comprising:

a remote control station;

data connection;

at least one field device with a sensor for determining at least one physical process variable, said at least one field device exchanges data with said remote control station via said data connection; and

at least one fuel cell electrically connected with said at least one field device, wherein:

said at least one fuel cell at least partially covers the energy requirement of said at least one field device, and

said at least one fuel cell is arranged remotely from said at least one field device.

14. (Previously presented) The apparatus as claimed in claim 13, wherein: said data connection between the control station and said at least one field device is accomplished wirelessly.

15. (Previously presented) The apparatus as claimed in claim 13, wherein: multiple field devices are provided, which are electrically connected with said at least one fuel cell.

16. (Previously presented) The apparatus as claimed in claim 14, wherein: said data connection includes a field bus.

17. (Previously presented) The apparatus as claimed in claim 16, wherein:
said at least one fuel cell is connected with said at least one field device via
said field bus.

18. (Previously presented) The apparatus as claimed in claim 13, wherein:
said at least one fuel cell is arranged in said control station.

19. (Previously presented) The apparatus as claimed in claim 13, wherein:
a first fuel cell and a second fuel cell are provided, and
said at least one field device is connected, at least at times, with said first fuel
cell and said second fuel cell.

20. (Previously presented) The apparatus as claimed in claim 19, wherein:
said at least one field device is connected, at least at times, with only one of the
two fuel cells.

21. (Previously presented) The apparatus as claimed in claim 13, wherein:
multiple fuel cells are combined into a fuel cell package.

22. (Previously presented) The apparatus as claimed in claim 13, wherein:
said at least one field device is positioned in an area where there is danger of
explosion.

23. (Previously presented) The apparatus as claimed in claim 13, further
comprising:

a monitoring unit, which issues a warning/error report as soon as the energy
supplied by said at least one fuel cell falls beneath a predetermined limit value.

24. (Previously presented) The apparatus as claimed in claim 13, further
comprising:

a fueling unit, via which said at least one fuel cell can be fueled.

25. (Previously presented) The apparatus as claimed in claim 13, wherein:
said data connection between the control station and said at least one field device is accomplished via a data line.

26. (Previously presented) The apparatus as claimed in claim 14, wherein:
said data connection includes a two-wire line.

27. (Currently Amended) The apparatus as claimed in ~~the previous~~ claim 26,
wherein:
said at least one fuel cell is connected with said at least one field device via said two-wire line.

28. (Previously presented) The apparatus as claimed in claim 22, wherein:
said fuel cell supply the field device with energy from a remote, safe location.

29. (Previously presented) The apparatus as claimed in claim 13, wherein:
said at least one fuel cell is arranged in an explosion-protected zone.

30. (Previously presented) The apparatus as claimed in claim 16, wherein:
said at least one fuel cell is connected with field bus via a connection line.

31. (Currently Amended) The apparatus as claimed in ~~the previous~~ claim 30,
wherein:
energy is supplied from said at least one fuel cell to the field bus via a connection line.

32. (Previously presented) The apparatus as claimed in claim 13, further comprising:
a monitoring unit for said fuel cell, said monitoring unit signalling when a fuel supply of said fuel cell falls beneath a predetermined limit value.

33. (Previously presented) The apparatus as claimed in claim 13, wherein:

apparatuses for limit level detection, measuring apparatuses for determining a flow rate, measuring apparatuses for determining a pressure in a line, measuring apparatuses for determining a pressure in a container, and measuring apparatuses for determining a temperature of a medium.

34. (Previously presented) The apparatus as claimed in claim 13, wherein:
said at least one field device uses ultrasonic waves for determining a fill level of fill substance in a container.

35. (Previously presented) The apparatus as claimed in claim 13, wherein:
said at least one field device uses electromagnetic waves for determining a fill level of fill substance in a container.